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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,675	08/14/2001	Hiroyuki Kamiya	JP9-2000-0222 (8728-554)	9081
7590 02/02/2004 F. CHAU & ASSOCIATES, LLP Suite 501 1900 Hempstead Turnpike East Meadow, NY 11554			EXAMINER HUYNH, YENNHU B	
			ART UNIT 2813	PAPER NUMBER

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,675

Applicant(s)

KAMIYA ET AL.

Examiner

Yennhu B Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 12, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8/14/01.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Applicant 's Election filed on 11/19/03.

Election/Restrictions

Applicant's election of claims 9-15 in Paper filed on 11/19/03 is acknowledged.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement filed on 8/14/03 is being considered by the examiner.

Oath/Declaration

Oath/Declaration filed on 8/14/02 is accepted.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method For Manufacturing a Liquid Crystal Display Panel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Izumi et al. (U.S. 5,956,108) in view of Masayuki et al. (JP10193242).

Izumi et al. at figs. 1-7 in related text cols. 1-5 disclose a multi-panel with solid film bonding layers device and fabrication, which include:

-Re. claim 9: a LCD panel having a pair of substrate 2 disposed oppositely to each other with a predetermined distance and secured by sealant 8/bonding 9 formed along a peripheral portion, and liquid crystal sealed in a region inside the sealant between the pair of substrates 4 & 5 (col.6, lines10-13); reinforce 3 flatly supporting one of pair substrate; layer 21supporting the other of the pair of substrates so as to be bent by supporting two opposing sides thereof (fig. 4C), and a bending amount is controlled to be a specified value (col.8, lines 59-68); bringing the one substrate 3a and 3b close to each other to reach the predetermined distance, wherein the liquid crystal panel 2 are sandwiched between them (col.13, lines 14-33).

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However, Izumi et al. do not disclose applying a load in the bending direction of the other substrate with respect to a position having maximum bending of the other substrate and /or a vicinity of the same; and releasing the supporting of the other substrate after the application of the load.

Masayuki et al. in related art disclose a manufacturing of LCD device, which include applying a load of liquid crystal dripped at the central part of the section and own weight of supporting eight. All are under pressure in the bending direction of the other substrate with respect to a position having maximum bending; and releasing the supporting of the other substrate 8 by supporting 9 on the surface of liquid crystal 5 after the application of the load (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Izumi et al. invention by incorporation applying a load in the bending direction of the other substrate to press the second substrate supported by the first supporting in direction for mounting; and incorporation the releasing the supporting of the other substrate after the application of the load to prevent cracking and obtain a normal force to the film.

Izumi et al. also disclose:

-Re. claims 10 & 13: wherein each of the bringing the substrates closed together and applying a load bending direction of the substrates is performed in vacuum (col. 9 lines 3-9 or col. 18 lines 43-48).

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-Re. claim 11: wherein after bringing the substrates closed together, the pair of substrates are aligned each other through the pixels alignment (col.13 lines 53-62).

Allowable Subject Matter

Claims 12,14 & 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The prior art do not disclose a method for manufacturing liquid crystal panel, which include the steps of aligning the pair of substrates each other finely by applying a normal force to a film having high coefficient of static friction which is disposed on the other substrate (cl. 12); wherein the step of aligning is executed soon after releasing the supporting of the other substrate (cl.14); and wherein the normal force is larger than the value of a reaction between the electrodes divided by the coefficient of static friction of the film (cl.15).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yennhu B Huynh whose telephone number is 703-308-

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6110 (and the new telephone number 571-272-1692 will be effected from 2/5/04). The examiner can normally be reached on 8.30AM-7.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached on 703-308-4940. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-7724.

Yennhu B.Huynh, 

Examiner,

012904